Bioxodes positive Phase 2a stroke data show breakthrough potential of innovative therapeutic candidate BIOX-101

- **Safety endpoint met, with encouraging signs of efficacy in trial with 23 patients suffering from intracerebral hemorrhage (ICH)**
- **Findings suggest BIOX-101 reduced hematoma volume and slowed perihematomal edema growth**
- **Trend to functional recovery with BIOX-101 more favorable than in SoC group**
- **Consistent anti-inflammatory biomarker responses aligned with positive clinical efficacy signals**
- **No deaths after a mean follow-up of 8 months**
- **Launching Series B financing to fund potentially registrational Phase 2b trial**

Gosselies, Belgium, 11 September 2025 (08:30 am CET) – Bioxodes SA, a clinical stage biopharmaceutical company developing novel therapies for the prevention and treatment of thrombotic and inflammatory diseases, today announces encouraging second interim results from the BIRCH Phase 2a clinical trial of its lead asset, BIOX-101, to treat intracerebral hemorrhage (ICH). The results confirm and expand upon the positive findings of the first set of interim results, announced in April. The new data show that all patients treated with BIOX-101 experienced a reduction in hematoma. This finding was further supported by biomarker measurements, all of which trended in support of the clinical observations. The Data Monitoring Committee in its recommendation unanimously endorsed proceeding to a Phase 2b or Phase 3 efficacy trial.

"These results suggest BIOX-101 may become a disruptive novel therapeutic, offering a long-awaited breakthrough for treatment of stroke, starting with ICH," said **Marc Dechamps, Chief Executive Officer of Bioxodes**. "We are in discussions with prospective investors and partners to support the launch of a potentially registrational Phase 2b trial of BIOX-101 to treat intracerebral hemorrhage. Given the high unmet medical need in ICH and Orphan Drug Designations for BIOX-101 in both the U.S. and EU, we believe this breakthrough therapeutic candidate can come to market as early as 2030."

"Given the success of the Bioxodes […] trial, it is reasonable to maintain similar subject eligibility criteria. It is also suggested to include perihematoma edema as an efficacy endpoint," the DMC said**.**

Highlights of the second interim results in 23 patients:

- Patients treated with BIOX-101 showed a trend toward slower perihematomal edema expansion over 10 days after the initial stroke.
- The hemorrhage volume appeared to decrease more steadily over 10 days in the BIOX-101 group.
- The body's inflammatory reaction - as measured by the Neutrophil-to-Lymphocyte Ratio (NLR) - showed a better trend.
- Encouraging functional outcomes: signals of recovery appeared more favorable than those seen in the SoC group. More patients regained independence on day 90 after BIOX-101 treatment than with SoC (achieving mRS scores of 0-2) [1].

"An effective therapy like BIOX-101 is urgently needed for the millions of patients struck by ICH each year. ICH is a life-threatening disease, and the downstream damage from inflammation and secondary ischemia can be even more deadly or debilitating than the initial event. Unlike currently marketed anticoagulants, BIOX-101 at the molecular level works to reduce clotting without increasing bleeding, by targeting Factors XIa and XIIa of the intrinsic coagulation pathway," said **Hans Warrinnier, Chief Medical Officer of Bioxodes.** "Perhaps just as importantly, BIOX-101 also exerts anti-inflammatory effects by inhibiting activation of neutrophils and their release of extracellular DNA filaments, called NETs, which can cause excessive inflammation, exacerbating brain damage. We believe those synergistic mechanisms explain the favorable signals observed in the study," he said.

Marketed anticoagulants cannot be used to treat ICH because they often increase bleeding. BIOX-101 is the first-in-class therapeutic candidate with anti-clotting effect that does not increase bleeding and has also been shown to exert potent synergistic anti-inflammatory effects in ICH patients in the BIRCH trial, which may contribute to better outcomes for patients.

"In this first study of BIOX-101 in patients suffering from acute intracranial hemorrhage the drug appears to be safe in this population. Although this study was not statistically powered to show potential benefit of BIOX-101, initial findings on progression of edema support the further evaluation in larger clinical trials to determine clinical benefit on functional outcomes," said **Prof. Robin Lemmens, Principal Investigator of the BIRCH study and head of the stroke unit at the University Hospital Leuven.**

ICH is a devastating condition with no approved therapies, accounting for 40% of all stroke-related deaths, despite making up just 15% of cases. Mortality approaches 50 % at 30 days [2], and approximatively half of all ICH-related deaths happen within the first 24 hours [3]. Fewer than 20% of survivors achieve functional independence after six months, often due to secondary damage resulting from the untreatable bleeding and associated inflammation, which causes secondary ischemia, neuroinflammation and neuronal damage, amongst others.

Bioxodes stopped recruiting for the BIRCH Phase 2a trial after treating 23 patients in order to bring forward the launch of the Phase 2b efficacy trial. The primary safety endpoint was met and all the exploratory secondary measures, including imaging, pharmacokinetics and pharmacodynamics, suggest that BIOX-101 has shown good potential to provide clinical benefits, something which needs to be confirmed in larger, controlled trials. Despite expectations to the contrary, no deaths were reported. The data will be presented in more detail at upcoming academic meetings and submitted to peer-reviewed journals for publication.

Bioxodes received Orphan Drug Designation for BIOX-101 in both the U.S. and in Europe in March 2025. The company, in discussion with regulatory authorities, is planning to file for PRIME status with the EMA later this year and intends to pursue Fast Track designation with the FDA at a subsequent stage of development. The planned Phase 2b trial could be sufficient to submit BIOX-101 for conditional marketing authorizations in the U.S. and Europe. Thus, if initiated by early 2027, Bioxodes believes that BIOX-101 could become available to patients as early as 2030. Bioxodes also plans to develop BIOX-101 to treat acute ischemic stroke and an undisclosed indication. In addition, the company plans to further characterize BIOX-101's anti-inflammatory mechanism and develop novel drug candidates targeting the neutrophil extracellular traps (NETs) for thrombo-inflammatory and inflammatory diseases.

BIOX-101 is a proprietary recombinant version of a small protein found in the saliva of the tick (*Ixodes ricinus*). It is designed to inhibit the harmful secondary effects of hemorrhagic stroke such as secondary ischemia, neuroinflammation and neuronal damage. Unlike currently marketed anticoagulants, BIOX-101 reduces clotting without increasing bleeding, by targeting Factors XIa and XIIa of the intrinsic coagulation pathway. The product also exerts anti-inflammatory effects by inhibiting activation of neutrophils and their release of extracellular DNA filaments (called NETs), which can cause excessive inflammation, exacerbating brain damage and disrupting the blood-brain barrier. Bioxodes has completed a positive Phase 2a clinical proof of concept trial of BIOX-101 to treat ICH and is currently planning a Phase 2b trial in ICH and Phase 2 trials of BIOX-101 to treat acute ischemic stroke and an undisclosed indication.

1. mRS stands for Modified Rankin Scale, a six-level scale to classify the degree of disability in stroke patients

2. McGurgan, I.J., et al., *Acute intracerebral haemorrhage: diagnosis and management.* Pract Neurol, 2020. **21**(2): p. 128-36.
3. Hemphill, J.C., 3rd, et al., *The ICH score: a simple, reliable grading scale for intracerebral hemorrhage.* Stroke, 2001. **32**(4): p. 891-7.

Bioxodes SA (www.bioxodes.com) is a clinical stage biopharmaceutical company developing novel therapies for the prevention and treatment of thrombotic and inflammatory diseases. The company's lead asset, BIOX-101, is a first-in-class drug candidate being developed to treat thromboinflammatory disease. BIOX-101's unique mechanism of action is the foundation of an innovative pipeline of drug candidates for treatment and prevention of (thrombo)inflammatory diseases. Worldwide, Bioxodes holds both granted and pending patents associated with BIOX-101. Bioxodes research is supported by the Walloon Region (*SPW Recherche*), and the company is registered in Belgium under number 825.151.779.

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